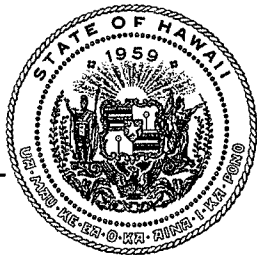


DEPT. COMM. NO. 93DAVID Y. IGE
GOVERNORLUIS P. SALAVERIA
DIRECTORMARY ALICE EVANS
DEPUTY DIRECTOR**DEPARTMENT OF BUSINESS,
ECONOMIC DEVELOPMENT & TOURISM**No. 1 Capitol District Building, 250 South Hotel Street, 5th Floor, Honolulu, Hawaii 96813
Mailing Address: P.O. Box 2359, Honolulu, Hawaii 96804
Web site: www.hawaii.gov/dbedtTelephone: (808) 586-2355
Fax: (808) 586-2377

December 19, 2016

The Honorable Ronald D. Kouchi,
President and Members
of the Senate
Twenty-Eighth State Legislature
State Capitol, Room 409
Honolulu, Hawaii 96813

The Honorable Joseph M. Souki,
Speaker and Members of the
House of Representatives
Twenty-Eighth State Legislature
State Capitol, Room 431
Honolulu, Hawaii 96813

Dear President Kouchi, Speaker Souki, and Members of the Legislature:

For your information and consideration, I am transmitting a copy of the High Technology Development Corporation Annual Report, as required by Section 206M-3.5, Hawaii Revised Statutes. In accordance with Section 93-16, Hawaii Revised Statutes, I am also informing you that the report may be viewed electronically at:
<http://dbedt.hawaii.gov/overview/annual-reports-reports-to-the-legislature/>.

Sincerely,

A handwritten signature in black ink, appearing to read "Luis P. Salaveria".

Luis P. Salaveria

Enclosure

c: Legislative Reference Bureau



HOW WE'RE BUILDING HAWAII'S TECH SECTOR

A ROADMAP TO 80|80

High Technology Development Corporation
Annual Report Fiscal Year 2016

HIGH TECHNOLOGY DEVELOPMENT CORPORATION

FAST TRACKS TO 80|80

Five New Programs in Fiscal Year 2016

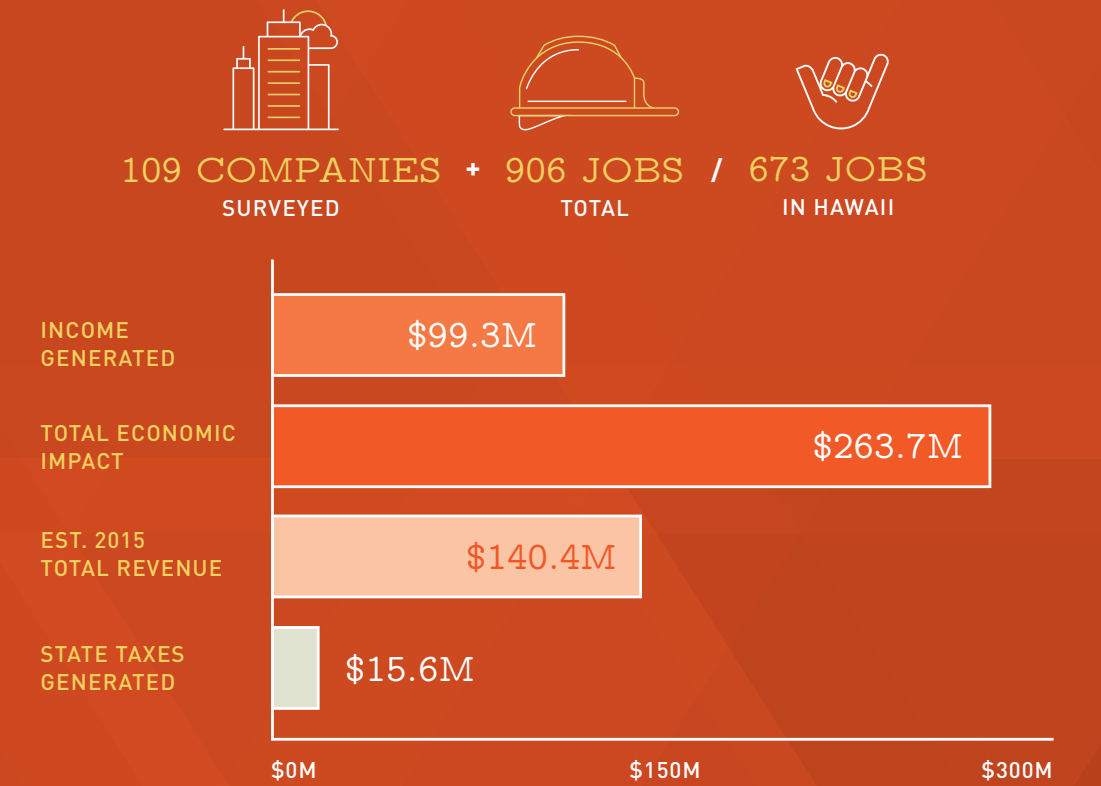
HTDC invested in Hawaii-based businesses, turbo-charging innovation and making strides toward its goal to create 80,000 new tech and innovation jobs earning \$80,000 or more by 2030.

- 1 | MANUFACTURING ASSISTANCE PROGRAM
- 2 | HAWAII OFFICE OF NAVAL RESEARCH ALTERNATIVE ENERGY
- 3 | HAWAII SMALL BUSINESS INNOVATION RESEARCH II & III
- 4 | NEIGHBOR ISLAND INNOVATION INITIATIVE
- 5 | TECHHIRE

Building the infrastructure, investing the capital and training the talent for Hawaii's innovation & technology future.

2015 ANNUAL ECONOMIC IMPACT

ANNUAL ECONOMIC SURVEY RESULTS (Fiscal Year 2015)

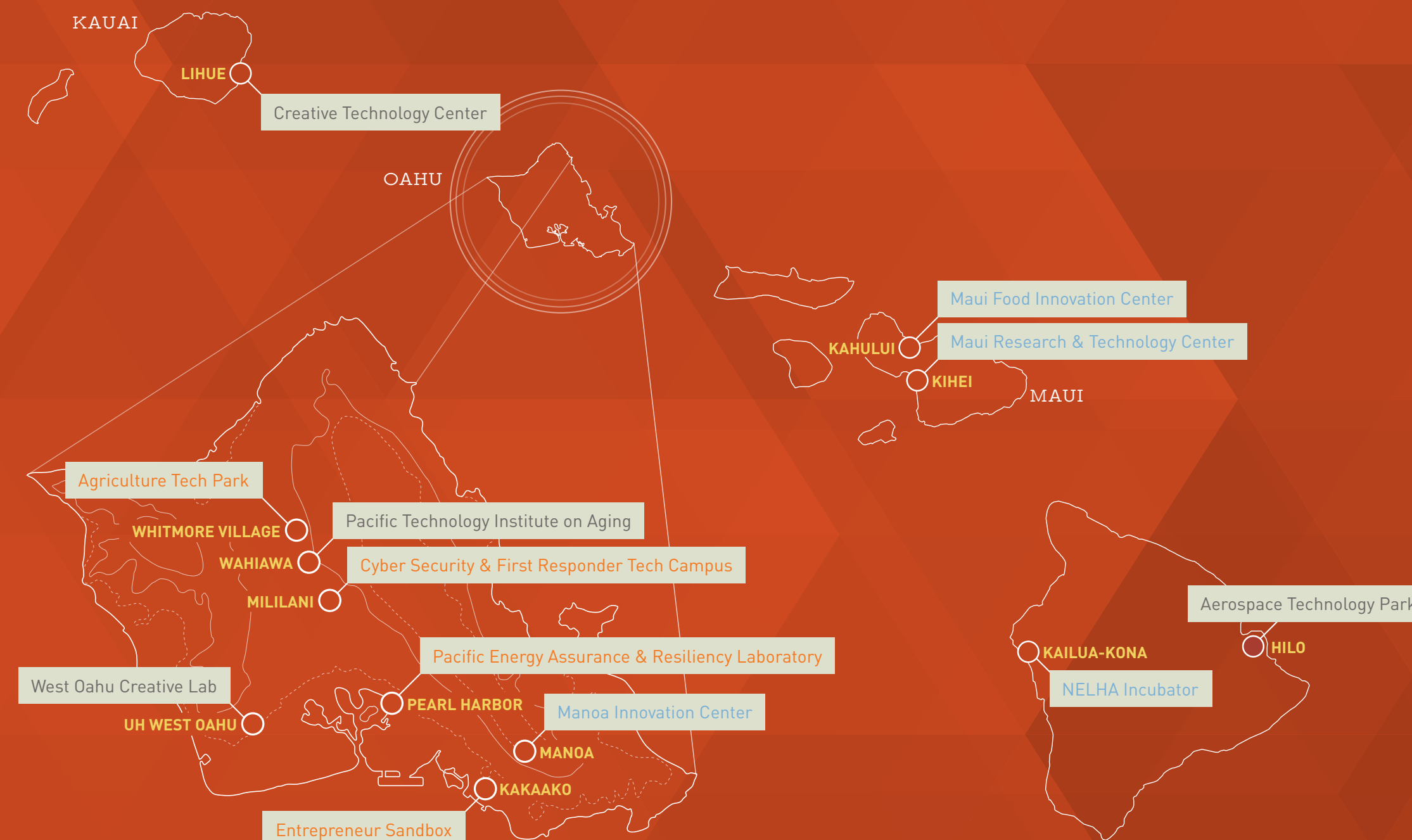


8X RETURN ON INVESTMENT FOR STATE

WHERE IT'S ALL HAPPENING

Hawaii Tech Infrastructure Map

Innovation is happening throughout the state. State and county agencies are partnering with HTDC to create dynamic innovation hubs across the state.



STATE AND COUNTY TECHNOLOGY CENTERS ACROSS HAWAII

ACTIVE PARKS IN PROGRESS EARLY PLANNING STAGES

EXECUTIVE DIRECTOR & CEO

ROBBIE MELTON

HTDC BOARD OF DIRECTORS

RACE A. RANDLE, Chair
Vice President, Development,
The Howard Hughes Corporation

DANIEL LEUCK, Secretary/Treasurer
CEO, Ikayzo, Inc.

FREDERICK D. DELSE, 1st Vice Chair
President, TeamPraxis

JOHN MORTON, PH.D.
Vice President for Community
Colleges University of Hawaii System
Representative for University of Hawaii

KELLY KING
Vice President, Pacific Biodiesel
Technologies, LLC

ELIJAH YIP
Partner, Cades Schutte LLP

DEREK LAU
President & Principal Broker
Real Estate Specialists

EX-OFFICIOS

CRAIG NAKANISHI
Partner, Cades Schutte LLP
Representative for Hawaii Strategic
Development Corporation

LINDA ROSEHILL
President, Rosehill & Associates
Representative for Natural Energy
Laboratory of Hawaii Authority

WESLEY K. MACHIDA
Director, Department of
Budget & Finance

LUIS P. SALAVERIA
Director, Department of Business,
Economic Development & Tourism



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Honolulu, Hawaii 96822
(808) 539-3806 | info@htdc.org

1



MAUI BREWING COMPANY CEO & FOUNDER, GARRETT W. MARRERO

MAKING 'MADE IN HAWAII' POSSIBLE

Manufacturing Assistance Program (MAP)

In 2016, MAP provided 51 manufacturers matching grants up to 20 percent, to a maximum of \$100,000, to purchase equipment, train employees, implement energy efficient projects and conduct feasibility studies. These companies invested over \$31 million for equipment and training.

2

CLEAN ENERGY PILOTS

Hawaii Office of Naval Research Alternative Energy (HONR)

Hawaii is becoming the world's clean, renewable energy leader. Helping to blaze the trail to energy independence, the HONR two-year pilot project provides matching grants up to \$500,000 for companies contracted by the U.S. Office of Naval Research to develop alternative energy solutions.

HONR Grants (Fiscal Year 2016)



\$1 MILLION + **3 COMPANIES**
FUNDED SUPPORTED



= **HAWAII**
CLOSER TO ENERGY
INDEPENDENCE

3

SMALL BIZ BIG ADVANCES

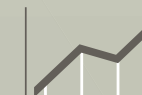
Hawaii Small Business Innovation Research II & III (HSBIR)

HTDC's flagship funding program was expanded to include all phases of federal SBIR funding. The expanded program provides matching grants up to 50 percent, to a maximum of \$500,000, for companies to develop new technologies and innovations of critical need to our nation.

HSBIR Phase 2 Awards, Statewide (Fiscal Year 2016)



\$7.9 MILLION + **\$2 MILLION** + **7 COMPANIES**
FEDERAL SBIR FUNDING HSBIR MATCHING FUNDS FUNDED



= **3.95**
INVESTMENT RATIO

4



MANA BAR FOUNDERS, JON GIBB & KAI LAWRENCE

CONNECTING ISLANDS OF INNOVATION

Neighbor Island Innovation Initiative (NI3)

NI3 was created to make HTDC truly engaged statewide by providing much-needed business assistance to the Neighbor Islands. NI3 provides mentorship, business support, and workshops, and helps identify funding opportunities for small and early-stage companies engaged in technology-based products or services. In 2016, the program met with 97 prospective companies and provided assistance to 35 companies.

"THE MAP GRANT HAS HELPED US TO PURCHASE EQUIPMENT FOR BETTER EFFICIENCY AND EXPANDED PRODUCTION. THESE CAPITAL IMPROVEMENTS WILL ENABLE US TO INCREASE ANNUAL SALES BY \$900,000, ADD EIGHT NEW EMPLOYEES, AND ATTRACT OVER \$1,500,000 IN ADDITIONAL INVESTMENTS."

Garrett W. Marrero, Kihei
CEO & Founder, Maui Brewing Company

"THE MATCHING FUND ENABLES US TO HIRE A HIGHLY TRAINED WORKFORCE THAT MAKES MAKAI GLOBALLY COMPETITIVE IN CUTTING EDGE TECHNOLOGY DEVELOPMENT, SOME OF WHICH HAVE BECOME MULTI-MILLION DOLLAR PRODUCTS."

Duke Hartman, Waimanalo
Vice President, Business Development, Makai Ocean Engineering, Inc.

"THE HAWAII MATCHING FUND IS CRITICAL TO ADVANCE OUR RESEARCH AND ENCOURAGES OTHER PARTNERS TO PROVIDE SIMILAR MATCHING SUPPORT MOVING US CLOSER TO COMMERCIALIZATION."

Neil Anthony Sims, Kailua-Kona
Co-Founder & CEO, Kampachi Farms

"STARTING A NEW BUSINESS IS CHALLENGING, BUT WE HAVE BEEN VERY FORTUNATE TO HAVE NI3 SUPPORTING US ALONG THE WAY. NOT ONLY HAVE THEY PROVIDED GREAT MENTORSHIP AS WE BRING OUR BUSINESS FROM CONCEPT TO MARKET, BUT THEY HAVE HELPED US MAKE VALUABLE BUSINESS CONNECTIONS AS WELL. WE ARE EXCITED TO SEE WHERE MANA BAR WILL GO, AND WE ARE CONFIDENT THAT WITH THE HELP OF NI3 THE BUSINESS WILL BE A SUCCESS."

Jon Gibb & Kai Lawrence, Lihue
Co-Founders, Mana Bar

MAKING IT REAL

HTDC Builds Up a Tech Community



WetWare Wednesday hosted 11 monthly networking events attended by 900+ people.



Innovate Hawaii served 53 clients who reported \$27.6 million in revenue and 138 jobs saved.



Sponsored 23 tech, entrepreneur and manufacturing events attended by 65,000+ people.



Hosted 12 workshops and grant info sessions on Kauai, Maui & Hawaii Island.

HTDC Incubator Programs



Supported 72 companies through incubator locations at **Manoa Innovation Center** and **Maui Research & Technology Center** and virtual incubation programs.



3 companies graduated from the incubator program.



THE ENTREPRENEUR SANDBOX IN KAKAOKO

BUILDING A PLAYGROUND FOR INNOVATION

The Entrepreneur Sandbox in Kakaako

HTDC successfully secured \$3 million in federal funds and \$3 million in state funds, plus private funds to construct an innovative community recreation center with the space and resources to foster creativity, both for start-ups and the public.

5

IF YOU BUILD IT...

Strengthening the Tech Workforce

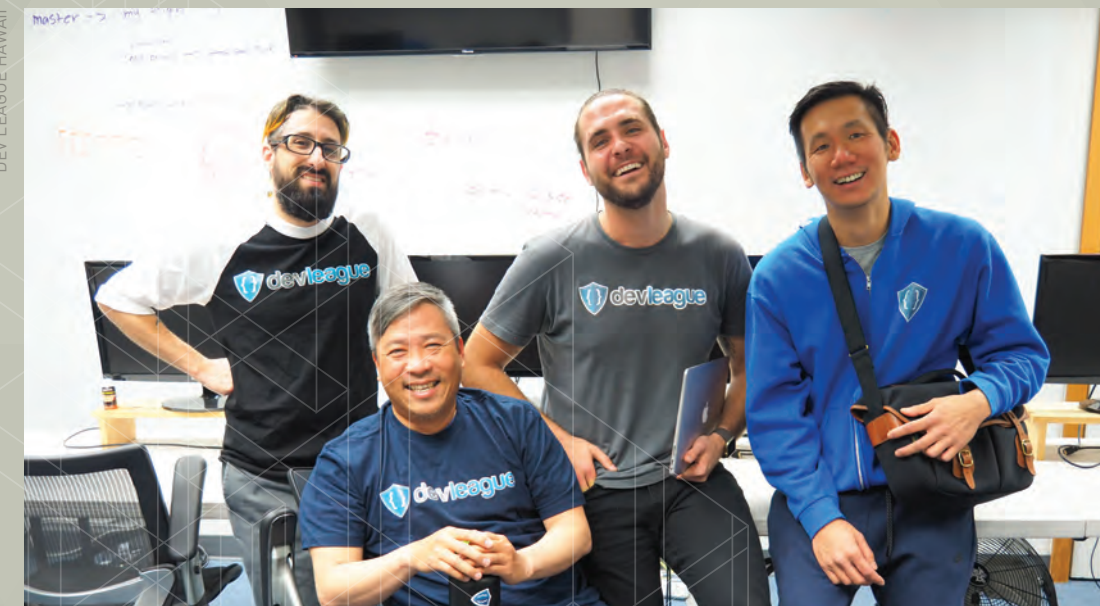


TechHire: In 2016, HTDC was selected by the White House to lead the TechHire jobs initiative in Hawaii. TechHire Hawaii, one of 50 hubs, is a public, private coalition that accelerates training to meet the increasing demand for tech jobs by employers.



TechJobs Hawaii: HTDC hosts Hawaii's premier portal for tech and related jobs. Free to both employers hiring in Hawaii and job seekers. Last year over 15,000 unique guests visited the site.

DEV LEAGUE HAWAII



BUILDING ON A FOUNDATION

HTDC Programs



HCATT
MOVING HAWAII OFF
THE GRID



NI3
MENTORING TECH & INNOVATION
ACROSS THE ISLANDS



INCUBATORS & INNOVATION
IGNITING GLOBAL
ENTREPRENEURS IN HAWAII



INNOVATE HAWAII
MANUFACTURING
HAWAII'S FUTURE



SPONSORSHIPS
SUPPORTING HAWAII'S
INNOVATION ECOSYSTEM



TECHHIRE HAWAII
TRAINING TOP TALENT FOR
TOP TECH CAREERS



MATCHING GRANTS
HSBIR, MAP & HONR

FUELING INNOVATION IN HAWAII

FUNDING FOR HAWAII'S INNOVATORS



THE METRICS INCLUDED IN THIS REPORT MEET THE STATE REPORTING REQUIREMENTS
FOR THE SBIR AND THE MANUFACTURING ASSISTANCE GRANT PROGRAMS.



FUNDING INNOVATION

Innovation requires ideas,
hard work and funding.

HTDC can help with all three.
This booklet specifically
addresses funding.



WHO IS HTDC?

We help fund Hawaii manufacturers, small local tech businesses and alternative energy R & D projects.

The mission of the High Technology Development Corporation (HTDC), a state agency, is to facilitate the development and growth of Hawaii's high technology industry. HTDC is providing the capital, building the infrastructure and developing the talent to foster innovation and diversify Hawaii's economy.

HTDC facilitates various grants to support local businesses, including investments designed to assist Hawaii manufacturers, small businesses developing new and innovative technologies, and matching funds to alternative energy research and development projects.

MOVING TOWARD 80/80

Our goal is to help create 80,000 new tech and innovation jobs earning \$80,000 or more by 2030. To reach that goal, we provide grants that can help tech firms grow.

HSBIR UP TO 50% TO \$500K

Matching grants for companies with federal Small Business Innovation Research awards.

HONR UP TO 50% TO \$500K

Matching grants for companies contracted by the Office of Naval Research to develop alternative energy solutions.

MAP UP TO 20% TO \$100K

Matching grants for manufacturers to upgrade equipment, train employees, etc.

GETTING IDEAS OFF THE GROUND

FUNDING FOR RESEARCH AND DEVELOPMENT (R&D)
HSBIR PHASE 1 GRANTS



Hawaii Small Business Innovation Research (HSBIR) Phase I, our flagship funding program, provides grants to Hawaii's R&D companies in the earliest phases of development.

Phase 0 awards are given to companies that are submitting their first SBIR, working with a consultant to complete and submit their federal grant application.

HSBIR PHASE 1 AWARDS, STATEWIDE (FY2016)

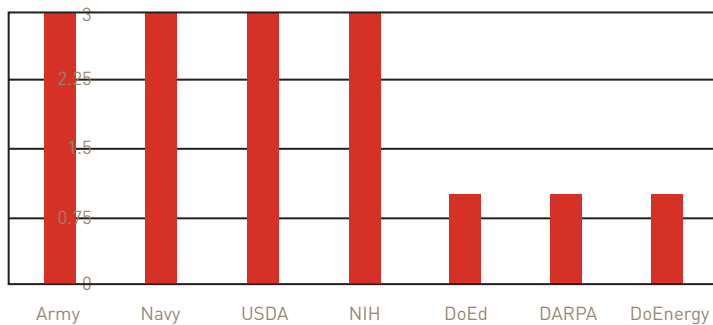
Total federal SBIR funding	\$1.755 million
HSBIR matching funds	\$.520 million
Number of companies	12 companies
Number of new companies	5 companies

THE PHASE 1 MATCHING FUNDS
HAVE HELPED TO HIRE EXPERTS
FROM THE UNIVERSITY OF
HAWAII, EXPEDITING OUR
PROTOTYPE AND ENABLING
US TO PURSUE FOLLOW-ON
FEDERAL OR PRIVATE FUNDING.

Nalu Scientific, LLC, Honolulu, HI
Isar Mostafanezhad, Founder

Since 1989, Hawaii has awarded matching grant funds to more than 135 companies and invested more than \$10 million to support these companies developing important products that will grow the state's economy.

SBIR FUNDING SOURCES: FEDERAL AGENCIES



FROM IDEA TO REALITY

NEW FUNDS FOR COMMERCIALIZATION
HSBIR PHASE 2 AND 3 GRANTS



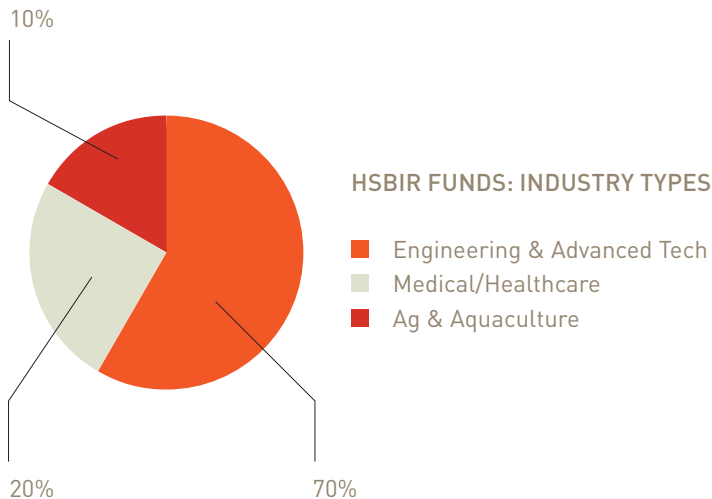
Hawaii Small Business Innovation Research (HSBIR) Phase 2 and Phase 3 awards allow companies to move past the research phase into product development. For fiscal year 2016, HTDC received \$2 million to award to Hawaii’s best technology companies with the greatest promise for commercialization.

HSBIR PHASE 2 AWARDS, STATEWIDE (FY 2016)

Total federal SBIR funding	\$11.4 million
HSBIR matching funds	\$2 million
Number of companies	10 companies
Investment ratio	5.71

HSBIR MATCHING FUNDS HAVE
ENABLED HIEVODEVO TO
PARTNER WITH A LEADING
AIRCRAFT MANUFACTURING
COMPANY TO TEST AND
VALIDATE THE TECHNOLOGY;
A FUNDAMENTAL STEP TOWARDS
A FUTURE SBIR PHASE 3 GRANT.

Hawaii Evolutionary Development, LLC, Kula, HI
Letizio De Lanney, CEO



MAP-PING OUT MORE LOCAL MANUFACTURING

NEW FUNDS FOR MANUFACTURERS
MAP GRANTS



Launched in the spring of 2016, the Manufacturing Assistance Program (MAP) provides up to 20 percent matching funds (\$100,000 maximum) to help local manufacturers expand with new equipment, employee training, or energy efficiency improvements. For fiscal year 2016, HTDC received \$2 million to award to qualified manufacturers.

.....

MAP AWARDS (FY2016)

Total applications received	69
Total applications funded	51
Total company investment	\$31,377,504
Total grants requested	\$3,401,169
Total matching grant awarded	\$1,903,634

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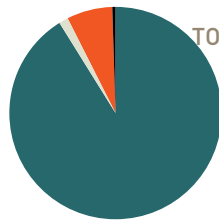
Projected economic impact*

New employees	363
New jobs earning > \$80K/year	70
Jobs saved	266

* These projections were reported by the applicants.

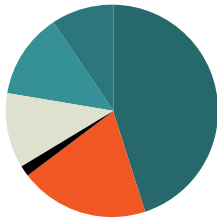
THE MAP GRANT HAS HELPED US TO PURCHASE EQUIPMENT FOR BETTER EFFICIENCY AND EXPANDED PRODUCTION. THESE CAPITAL IMPROVEMENTS WILL ENABLE US TO INCREASE ANNUAL SALES BY \$900,000, ADD 8 NEW EMPLOYEES, AND ATTRACT OVER \$1,500,000 IN ADDITIONAL INVESTMENTS.

Maui Brewing Co., Kihei, HI
Garrett W. Marrero, CEO/Founder



TOTAL GRANT FUNDING BY CATEGORY

- Equipment (\$1,738,104; 91%)
- Energy Efficiency (\$127,604; 7%)
- Training (\$31,793; 2%)
- Feasibility (\$7,317; 0%)



TOTAL GRANT FUNDING BY INDUSTRY

- Food (45%)
- Beverage and Tobacco (20%)
- Paper and Printing (11%)
- Chemical, Plastics, etc. (13%)
- Fabricated Metal and Transportation Equipment (9%)
- Textile and Apparel (2%)

There are approximately 1,700 manufacturers of all types across the islands that make the Made in Hawaii label a global brand.

THE HONR GRANT ENABLES
US TO PURSUE FURTHER
DEVELOPMENT AND HIRE A
HIGHLY SKILLED WORKFORCE
TO HELP BRING THE PROJECT
INTO COMMERCIALIZATION.

Navatek, Ltd., Honolulu, HI
Martin Kao, CEO

PILOTING INNOVATIVE ENERGY
PARTNERSHIPS

NEW FUNDS FOR ENERGY EFFICIENCY PARTNERSHIPS
HONR GRANTS

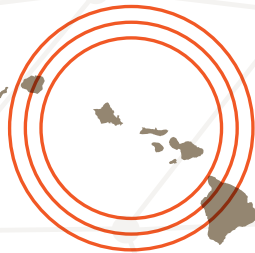
Hawaii state matching funds for U.S. Office of Naval Research Energy Projects (HONR) provides up to 50 percent, with a maximum of \$500,000, to companies developing new energy technology. The two-year pilot research program was signed into law by Gov. Ige in 2016 to help Hawaii achieve its goal of 100 percent renewable energy by 2045.

.....

Total HONR funding	\$11.3 million
HSBIR matching funds	\$1 million
Number of companies	3 companies

A light gray background featuring a network diagram with nodes and connecting lines. The nodes are small circles, and the lines are thin and gray, creating a web-like structure across the page.

FUNDS AWARDED BY COUNTY



CITY & COUNTY OF HONOLULU FUNDS AWARDED



HSBIR Phase 1

Number of companies	8
Total federal SBIR funding	\$1,158,544
Total matching funds	\$444,008

HSBIR Phase 2

Number of companies	8
Total federal SBIR funding	\$5,201,849
Total matching funds	\$1,330,000

Manufacturing Assistance Program

Total number of companies	29
Total grant funding	\$1,096,592

“THE NEW HSBIR PHASE 2 MATCHING GRANTS ARE A CRITICAL PART OF OUR STRATEGY. WITHOUT THEM, WE WOULD BE FORCED TO CHOOSE BETWEEN IMPROVING OUR TECHNOLOGY AND PURSUING THE FUNDING NEEDED TO COMMERCIALIZE OUR TECHNOLOGY.”

Terasys Technologies LLC, Honolulu, HI
Kevin Miyashiro, CEO & Founder

MAUI COUNTY FUNDS AWARDED



HSBIR Phase 1

Number of companies	3
Total federal SBIR funding	\$149,980
Total matching funds	\$45,992

HSBIR Phase 2

Number of companies	2
Total federal SBIR funding	\$2,705,236
Total matching funds	\$670,000

Manufacturing Assistance Program

Total number of companies	7
Total grant funding	\$306,084

“INNOVATE HAWAII’S MANUFACTURING ASSISTANCE GRANT HAS HELPED US TO PURCHASE EQUIPMENT FOR EFFICIENCY AND EXPANDED PRODUCTION. THESE CAPITAL IMPROVEMENTS WILL ENABLE US TO INCREASE ANNUAL SALES BY \$11,000,000, SAVE \$420,000 IN COST, AND RETAIN 25 HIGH PAYING JOBS IN A RURAL AREA.”

Pacific Biodiesel Technologies, Kahului, HI
Robert King, President

COUNTY OF HAWAII FUNDS AWARDED



HSBIR Phase 1

Number of companies	1
Total federal SBIR funding	\$100,000
Total matching funds	\$30,000

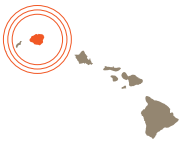
Manufacturing Assistance Program

Total number of companies	6
Total grant funding	\$225,424

“THE HAWAII MATCHING FUND IS CRITICAL TO ADVANCE OUR RESEARCH AND ENCOURAGES OTHER PARTNERS TO PROVIDE SIMILAR MATCHING SUPPORT MOVING US CLOSER TO COMMERCIALIZATION.”

Kampachi Farms, Kailua-Kona, HI
Neil Anthony Sims, Co-Founder & CEO

KAUAI COUNTY FUNDS AWARDED



Manufacturing Assistance Program

Total number of companies

9

Total grant funding

\$276,720

“THE MAP GRANT WAS THE INCENTIVE WE NEEDED TO UPGRADE OUR KITCHEN PRODUCTION EQUIPMENT AND MAKE OUR OPERATIONS MORE EFFICIENT FOR TIME AND MORE CONSISTENT DURING PRODUCTION. IT ALLOWED US TO PURSUE NEW RETAIL AND WHOLESALE BUSINESS. THIS PROGRAM MADE A SIGNIFICANT POSITIVE IMPACT ON OUR ISLAND BUSINESS AND CONSEQUENTLY, TO ALL OF OUR CUSTOMERS TOO.”

Papalua Island LLCs, Kapaa, HI
Morris Wise, Owner

INTERESTED IN GETTING FUNDING? APPLY NOW!

HTDC is accepting applications for both HSBIR and MAP programs.
More details for each funding program are available at www.htdc.org.

.....

ABOUT HSBIR APPLICATIONS

Applicant requirements: Must be recipients of a federal SBIR grant, have a strong commercialization plan and demonstrate economic development for the company.

Funding Amount: Up to 50 percent of the federal SBIR award, a maximum of \$500,000.

Application Process: Applicants make two presentations to the review committee. Applications are available online. They are accepted throughout the year and reviewed by the committee quarterly.

.....

ABOUT MANUFACTURING ASSISTANCE PROGRAM (MAP) APPLICATIONS

Applicant Requirements: Must be a manufacturer with qualifying expenses for purchasing manufacturing or energy efficiency equipment, training employees on manufacturing equipment, or third-party feasibility studies for manufacturing processes or facilities.

Funding Amount: Companies will be reimbursed up to 20 percent, to a maximum of \$100,000, for qualified expenses.

Application Process: Applicants must have a manufacturing NAICS code, a DUNS number and appropriate invoices before receiving payment. A committee will review all applications, which are accepted through April 30, 2017.

TO APPLY FOR FUNDING
CONTACT:

MAP

Wayne Inouye, mfggrant@htdc.org
www.htdc.org/mapgrant

SBIR

Sandy Park, sbir@htdc.org
www.htdc.org/hsbirgrant



htdc.org

2800 Woodlawn Drive
Honolulu, HI 96822